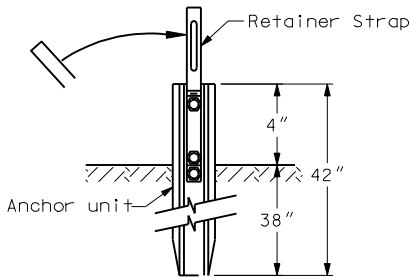


BREAKAWAY SYSTEMS FOR CONSTRUCTION ZONE SIGNS

D-704-8

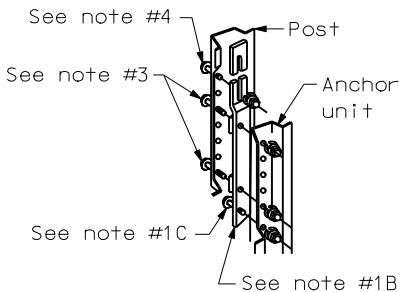
FLANGED CHANNEL

3 LB/FT U POSTS

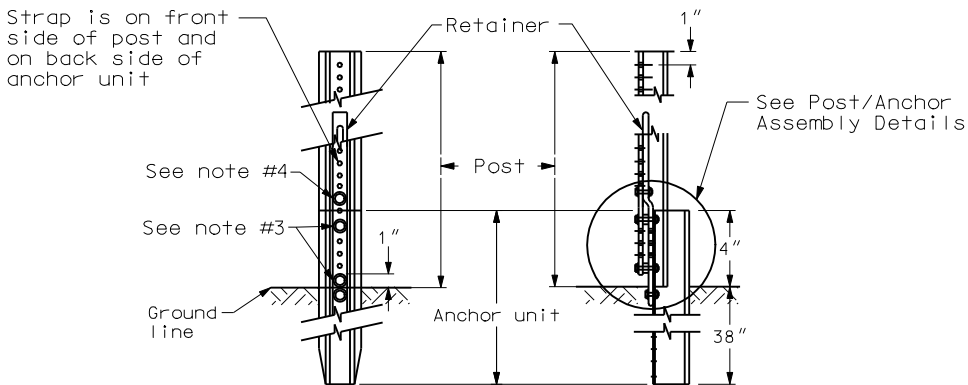


Anchor Unit & Strap Assembly Detail

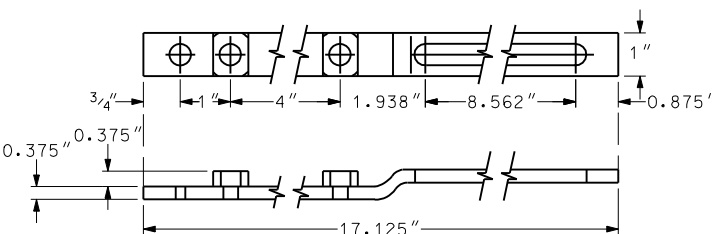
- STEPS OF INSTALLATION
1. A) Drive anchor unit to within 12" of ground level.  
B) Proper assembly established by lining up the top 3/4" slot of retainer spacer strap with top hole of anchor unit.  
C) Assemble strap to back of anchor unit using 3/8"-16 UNC x 2.0" long bolt, lock washer and nut.  
D) Rotate strap 90° to left.
  2. A) Drive anchor unit to 4" dimension.  
B) Rotate strap to vertical position.
  3. A) Place 3/8"-16 UNC x 2" bolt, lock washer & nut in bottom of sign post to facilitate alignment of sign post with proper hole in anchor unit (this coincides with the bottom 3/4" slot in the strap).  
B) Alternately tighten two connector bolts.
  4. A) Complete assembly by tightening 3/8"-16 UNC x 2" long retainer bolt (this fastens sign post to retainer spacer strap).
  5. The base post, strap & sign post shall be properly nested. Proper nesting occurs when all flat surfaces of the base post, strap and sign post at the bolts have full contact across the entire width.



Post/Anchor Assembly Details

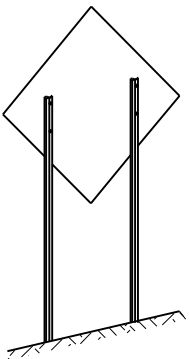


Front View Side View Sign Post Assembly Detail

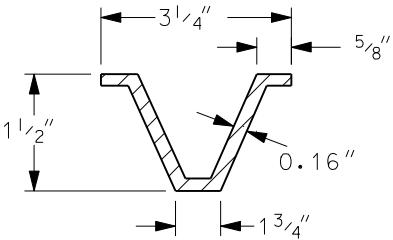


Retainer/Spacer Strap Detail

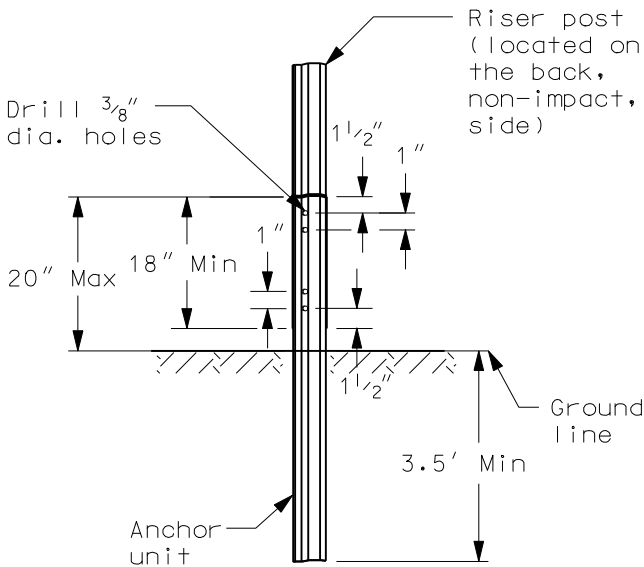
CHANNEL SIZE IN.	WALL THICKNESS IN.	WEIGHT PER FOOT LBS.	MOMENT OF INERTIA IN. 4	CROSS SECT. AREA IN. SQ.	SECTION MODULUS IN. 3
1.516 x 3.125"	.116	2.00	.179	.590	.225
1.532 x 3.125"	.124	2.25	.201	.648	.254
1.562 x 3.125"	.132	2.50	.233	.748	.289
1.578 x 3.125"	.140	2.75	.271	.819	.329
1.750 x 3.500"	.150	3.00	.372	.918	.403
1.750 x 3.500"	.175	4.00	.500	1.190	.560



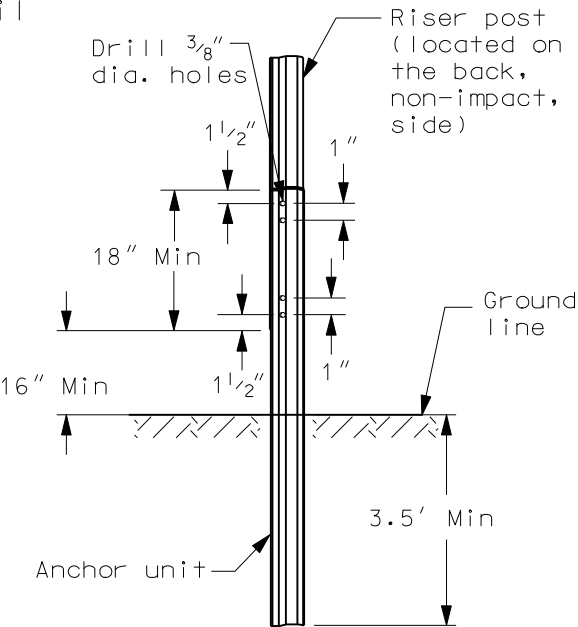
Typical Installation



U-Post Detail (3 lb/ft)



U-Channel Splice Option 1



U-Channel Splice Option 2

- Notes
1. Use 3 lb/ft riser anchor units and risers
  2. Driven riser posts shall be at least 7' long and embedded at least 3.5'.
  3. A splice shall overlap a minimum of 18".
  4. Use 4 bolts 5/16" diameter with washers and nuts. Two at top and two at bottom of splice.
  5. Anchor unit for guy wires shall be no more than 4" above ground and embedded at least 3.5'.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
07-28-93	
REVISIONS	
DATE	CHANGE
03-07-01	Revised U-post details
11-21-02	Deleted perforated tube
05-08-03	Revised U-channel splice
12-01-04	PE stamp added
06-29-05	Revised flanged channel note

This document was originally issued and sealed by MARK S GAYDOS Registration Number PE-4518, on 06/29/05 and the original document is stored at the North Dakota Department of Transportation